

CLAIMS

1. A surface-traversing vehicle comprising two bodies interconnected by means to move the bodies towards and away from each other, each said body being supported upon a multiplicity of resilient bristles (13; 25; 32) extending from it, characterised in that the bristles of each said body are mounted in groups upon a plurality of bristle-carrying members (10; 23; 31) each guided for movement towards and away from said body, and characterised further by fluid pressure means (15; 22; 34) to effect said guided movement of said bristle-carrying members in at least one of said directions.

2. A surface-traversing vehicle according to Claim 1, characterised in that the interconnected bodies are generally flat or are rotationally symmetrical.

3. A surface-traversing vehicle according to Claim 2, characterised in that the interconnected bodies are generally cylindrical and that the bristles extend generally radially outwardly or inwardly of the body.

4. A surface-traversing vehicle according to Claim 3, characterised in that alternate bristles or groups of bristles around the bodies are inclined to a small extent in alternate directions in the rotational direction of the bodies.

5. A surface-traversing vehicle according to any of the preceding claims, characterised in that the bristle-carrying members (10; 23) combine to cover the whole of the relevant surface of the body at one limit of their guided movement.

6. A surface-traversing vehicle according to Claim 5, characterised in that the bristle-carrying members (10; 23) each form one angular segment of the surface of a generally cylindrical body.

- 14 -

7. A surface-traversing vehicle according to any of the preceding claims, characterised in that the movement of the bristle-carrying members is guided by slots (12), guide channels, apertures or bores (21) in the body or by radial pins upon the body.

8. A surface-traversing vehicle according to any of the preceding claims, characterised in that the fluid pressure means comprises a membrane (15; 34) in contact with the inner faces of the bristle-carrying members (10; 31).

9. A surface-traversing vehicle according to any of Claims 1 to 7, characterised in that the fluid pressure means comprises a plurality of pistons (22) arranged to slide in fluid-tight bores (21) within the associated body.

10. A surface-traversing vehicle according to Claim 9, characterised in that the bristle-carrying members are themselves in the form of said pistons.

11. A surface-traversing vehicle according to any of the preceding claims, characterised in that it comprises also a resilient means (28) tending to resist the guided movement of the bristle-carrying members.

12. A surface-traversing vehicle according to Claim 11, characterised in that said resilient means comprises one or more springs.

13. A surface-traversing vehicle according to Claim 11 or Claim 12, characterised in that it also comprises one or more sensors to monitor the characteristics of the surface ahead of the vehicle.

14. A surface-traversing vehicle according to any of the preceding claims, characterised in that said resilient bristles

- 15 -

(13; 25; 32) are natural bristles or of a synthetic polymeric material or of a metal.

15. A surface-traversing vehicle according to Claim 14, characterised in that said resilient bristles (13; 25; 32) are of steel.

Cont
Sub
Pl

16. A surface-traversing vehicle according to any of the preceding claims, characterised in that the means to move the bodies towards and away from each other comprises electrical power.

17. A surface-traversing vehicle according to any of Claims 1 to 15, characterised in that the means to move the bodies towards and away from each other comprises fluid pressure.

18. A surface-traversing vehicle according to Claim 17, characterised in that the bodies are linked by a hydraulic or pneumatic cylinder.

19. A surface-traversing vehicle according to any of the preceding claims, characterised in that the bodies are further supported by one or more wheels, located upon said bodies or upon the links between them or upon one or more of the bristle-carrying members.

20. A surface-traversing vehicle according to any of the preceding claims, characterised in that it comprises three or more said bodies.

21. A surface-traversing vehicle according to Claim 20, characterised in that the bodies are coupled together in pairs, the two bodies in each pair being at a fixed distance apart.

22. A surface-traversing vehicle according to any of the preceding claims, characterised in that it comprises a control

means to effect automatically the relative movement of the bodies.

23. A surface-traversing vehicle according to any of the preceding claims, characterised in that it is operated from a remote position via an umbilical line towed by a similar towing vehicle.

卷之三